

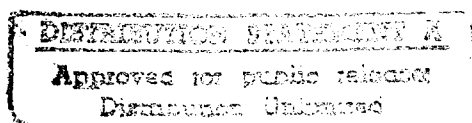
NAVAL WAR COLLEGE  
Newport, R.I.

**OPERATIONAL MANEUVER: FUNCTION OR FICTION?**

James T. Sanny, Sr.  
Major USMC

A paper submitted to the Faculty of the Naval War College in  
partial satisfaction of the requirements of the Department of Operations.

The contents of this paper reflect my own personal views and are not necessarily  
endorsed by the Naval War College or Department of the Navy.



Signature:

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## **ABSTRACT**

This paper is a study to determine the validity of maneuver as an operational art function and suitability of operational maneuver as a function of each service strategy. A function, operational function, maneuver, and maneuver as an operational function are defined. The Army and Marine Corps are analyzed as a whole to determine the suitability of maneuver as an operational function by using a historical example; the Desert Storm "Hail Mary" operational maneuver. The Navy is analyzed to determine the suitability of maneuver as an operational function within the framework of their modern "From the Sea" strategy. The Air Force is analyzed to determine the suitability of operational maneuver as a function within the framework of their air power maneuver doctrine. Two theory's are introduced to assist the reader with understanding this unexplored subject pertaining to joint terminology and doctrine.

The study concludes that maneuver is suitable within the framework of operational art functions. The apex of all operational art functions is operational maneuver during planning and execution of operational art. Maneuver as an operational function is suitable for use within the strategies of all services.

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# OPERATIONAL MANEUVER: FUNCTION OR FICTION?

"Victory is to the armies which maneuver."

Napoleon

## SECTION I

### INTRODUCTION

Maneuver, termed as an *operational function*, can stir up considerable debate and opposition between military and civilian professionals. There seem to be fewer opponents for maneuver defined as an operational function than proponents. In particular, the Navy War College does not teach maneuver as an operational function. The viewpoint for this study is reflected from a joint operational art perspective, because operational functions are designed for operational art planning. The paper begins by defining a function and operational function and their relationship. Maneuver is explored to determine whether it conforms to the same framework as the five operational functions described in the Joint Maritime Operations Syllabus used for instructing operational art at the Naval War College. The study concludes by examining how maneuver is employed as an operational function within each branch of the armed forces.

This author believes that maneuver is suitable for and exists within the framework of operational art functions. The *human element theory* is used to explain this idea. All functions are used as a component of the planning process for operational art. Maneuver, plays the major role during *planning* and *execution* of operational art. Furthermore, *maneuver* is the apex of all operational art functions. All functions primarily support maneuver, but also mutually support each other. The *maneuver apex theory* is used to explain this idea.

In conventional war, functions cannot sustain in combat without mutual support from each other. Conventional war planning and execution without operational maneuver as a function, is invalid, because operational maneuver is required for campaigns and major operations. *Maneuvering*, to exploit the enemy's weakness and center(s) of gravity, is the focus of the Joint Force Commander (JFC) who plans for victory. <sup>1</sup>

The hypothesis of this paper is that maneuver is the zenith of planning for operational art and that maneuver becomes the dominant function during the operational art process, while the remaining functions continue to play supporting roles. Additionally, maneuver applied as an operational function, opens up a whole new perspective from which maneuver can be viewed as the apex of planning and execution within the Army, Marine Corps, Navy and Air Force. Maneuver "It is an art that, properly employed, secures an advantage over the enemy and brings a force to bear in the most effective way." <sup>2</sup>

## **SECTION II**

### **WHAT IS A FUNCTION?**

"Any property or fact depending upon or varying with another."

Funk and Wagnel

The above definition, civilian origin as it may be, does relate to military planning. All planning factors used for the conduct of war *depend upon* one another for success. Additionally, all *planning factors vary* in degree as far as employment during planning and execution of the mission.

The Joint Pub (JP) 1-02 definition of a function "The appropriate or assigned duties, responsibilities, missions, or tasks of an...organization...the term "function" includes functions, powers, and duties." <sup>3</sup> The definition is broad in scope as to the relationship of duties, responsibilities, missions and tasks toward organizations, but the key word *missions* is relative to organizations at the tactical, operational and strategic levels of war. "The existence of a theater implies the concurrent existence of a [sic] "functions" that provide the operational commander the wherewithal to conduct routine actions and measures in peacetime as well as the means to plan, prepare, conduct, and sustain military actions across the full range of military operations." <sup>4</sup>

#### **A. OPERATIONAL FUNCTIONS**

"Therefore, in an effort to provide a common language that is in line with this evolving doctrine, the term "operational functions" is used here."

Professor Milan Vego, Naval War College Staff

The five principle operational functions are: Command, Control, Communications, Computers and Intelligence (C4I); Information Warfare/Command and Control Warfare (IW/C2W) Architecture; Operational Fires; Operational Logistics; and Operational Protection.<sup>5</sup>

JP 1-02 defines operational art as "The employment of military forces to attain strategic and or operational objectives through design, organization, integration, and conduct of strategies, campaigns, major operations and battles. Operational art translates the joint force commander's strategy into operational design, and, ultimately, tactical action, by *integrating key activities at all levels of war.*" <sup>6</sup> JP 1-02 defines a function as "The appropriate or

assigned duties, responsibilities, missions or tasks of an...organization." <sup>7</sup> Both definitions, of function and operational art, compliment each other by the JP 1-02 description. Therefore, functions are employed for the planning and execution of operational art. Henceforth, a function used in the planning and execution of operational art, can be defined as an operational function.

There is one basic element, which in totality, binds operational art and operational functions: the *human element*, which is the foundation for all existing military functions. Without the human element, all operational functions are invalid. This theory will be called the *human element theory*. Without the human element, the military or for that matter, war, would be impossible. All operational functions require the human element as the origin of their overall makeup. All other characteristics of operational functions are dependent upon the human element for the system to work.

The *human element theory* can be compared to Vego's theory of how the human element is explained in an operational function. Vego writes:

"The operational commander applies operational art to the planning and execution of his campaign or major operation not only by synchronizing joint forces in combat but also by synchronizing many operational-level activities. These activities cumulatively comprise what the U.S. Army calls "operational operating systems." However, this term apparently stresses the "systems" and does not give sufficient attention to the human element." <sup>8</sup>

The above assumption reflects that the "human element" has not received "sufficient attention" with Army "operational operating systems." How can this be, when compared to the *human element theory*, where war, or any characteristic of war, is invalid without the human presence. The *assumption* will always be clear; the *human element* exists across the



entire spectrum of the military as well as war. Therefore, "system" cannot be perceived to be devoid of the *human element*.

### **SECTION III**

#### **WHAT IS MANEUVER?**

"Maneuver is the linchpin between the physics and psychology of war, and it is the best means with which to defeat the morale of the enemy."

Robert Leonhard

"At the operational level, maneuver is a means by which JFCs set the terms of battle by time and location, decline battle, or exploit existing situations." <sup>9</sup> "Last, but not least, the US military has belatedly adopted a maneuver style of warfare." <sup>10</sup> All five operational functions must be able to support the JFCs concept of operations. The employment of maneuver at the operational-level is illustrated 84 times in JP 3-0, more than any of the other operational functions listed previously. This emphasis on the planning and employment of *maneuver* in JP 3-0, and for that matter the unlimited amount of data published about the use of maneuver in planning for operational art, is testimony to the theory that maneuver is at the apex of all planning and execution for operational art.

Combat evolution's revolve around offensive and defensive maneuver. For instance, if the mission for a JTF commander is to seize and occupy objectives (normally associated with terrain in a conventional war scenario), then he must plan for the employment of *maneuver* in order to accomplish his mission. Therefore, the theory that operational maneuver is the apex of all six operational functions is justified. The other five functions would then work in concert as *supporting functions* for operational maneuver.

The theory is illustrated below with the help of Schroedel's model of maneuver, mobility and movement.

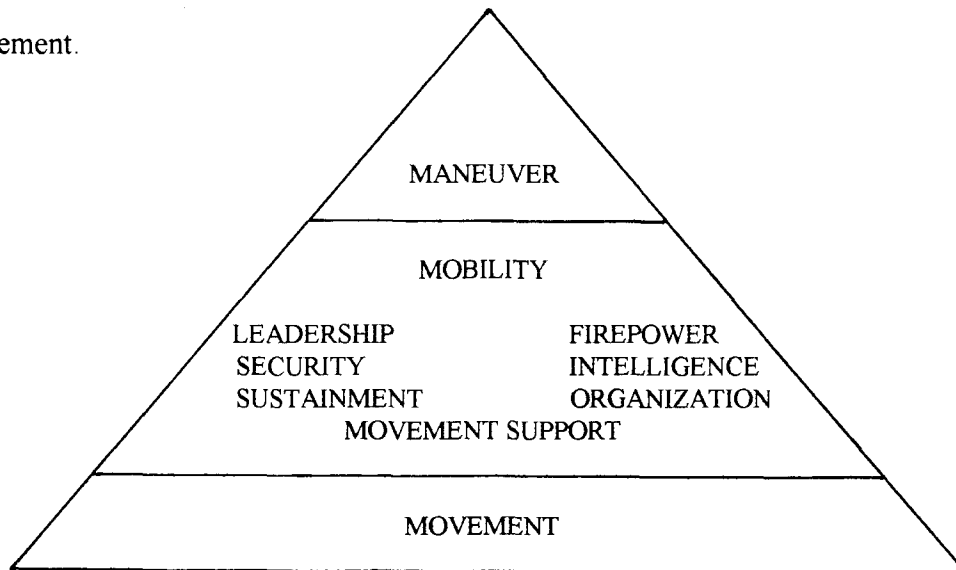


FIGURE 1 <sup>11</sup>

Schroedel's model exhibits the five supporting functions as the elements of mobility, which "builds on movement to produce the flexibility required for successful maneuver." <sup>12</sup> When comparing Vego's definitions and characteristics of the five operational functions and Schroedel's elements of mobility, the results are conclusive; there is a distinct relationship between the elements of mobility and the definitions and characteristics of Vego's operational functions. Although Schroedel's model was constructed for the art and science of operational maneuver, his model parallels and illustrates the theory of operational maneuver as the apex of all six operational functions. This idea will be called the *maneuver apex theory*.

The maneuver apex theory is defined as follows: Once maneuver is set in motion on the battlefield, the supporting operational functions begin their push to support maneuver's momentum. When offensive maneuver stops (objectives are secured, maneuver pauses or maneuver reverts to the defensive posture) the supporting operational functions continue to

sustain at their own tempo. When offensive maneuver begins again, the supporting functions shift to thrust their assistance to the energized maneuver tempo.

Maneuver is not the primary effort always during *planning* and *combat*, but maneuver becomes the primary operational function once the push for the objective is executed. Maneuver does receive equal emphasis during the planning stage of an operation and is idle during the planning cycle, until H-Hour. The following explains the scenario. In the beginning of planning, the other five functions receive considerable attention during this stage and all the five functions are activated prior to commencement of operational maneuver. Tactical fires (preparatory, to soften up the battlefield), are often employed before maneuver, but continue to support once operational maneuver commences. Operational maneuver then sets the tempo of the execution phase. This example proves that the supporting operational functions sustain maneuver.

#### **A. MANEUVER AS AN OPERATIONAL FUNCTION**

Maneuver is one of the key ingredients of the operational level of war and as a function, represents one of the true cornerstones of war at the operational level.

Major Charles T. Crenshaw III, USA

As mentioned previously, planning is the glue that binds the ingredients of an operation for execution and success on the battlefield. The Army's FM 100-5 Operations manual defines maneuver as a combat function on the tactical, operational and strategic levels of war.<sup>13</sup> The Marine Corps' FMFM-1 Warfighting manual describes maneuver as two dimensional. "It is through maneuver in *both* dimensions (time and space) that an inferior

force can achieve decisive superiority at the necessary time and place." <sup>14</sup> "The Marine Corps stresses maneuver as an operational function." <sup>15</sup>

As previously stated in this paper, the comparison of Schroedel's elements of mobility and the characteristics of Vego's five functions, revealed a parallel relationship. This analogy supports the theory that operational maneuver is the apex of all operational functions and that without maneuver at the pinnacle, all other functions will remain in a state of equilibrium, until maneuver is shifted into motion. Once operational maneuver begins, all other operational functions increase tempo appropriately, to support maneuver tempo. Hence, the sixth operational function is born: operational maneuver. The six operational functions, as they will be identified from this point on, have spanned the distance of time and have become more effective by improvements in technology.

## **SECTION IV**

### **OPERATIONAL MANEUVER AS AN OPERATIONAL FUNCTION**

#### **A. WITHIN THE FRAMEWORK OF THE ARMY/ MARINE CORPS**

Commanders at the operational-level must coordinate major functional activities such as maneuver that must be synchronized in time, space and aim.

Army Operations Manual FM 100-5, 1986

The Army was the first branch of the military to grasp the significance of maneuver as a major operational function. The revised 1993 edition of the FM 100-5 defines maneuver at the operational-level as a combat function. <sup>16</sup> As a combat function, operational maneuver helps the commander build and sustain combat power at the operational-level. All Army combat functions parallel the six operational functions documented previously in this paper.

The analogy can be drawn from the Army's definition that operational maneuver is at the forefront of Army Warfighting doctrine.

Maneuver as an operational function was demonstrated during Desert Storm when General Schwarzkopf commanded the coalition ground forces. The maneuver apex theory can be applied to his planning strategy of operational art. Schwarzkopf's brilliant, but simple "Hail Mary" sweeping flanking maneuver into southern Iraq, left the Iraqi leadership in a state of disarray, while at the same time vaulting General Schwarzkopf into the limelight of military history and fame. All supporting operational functions were planned for and employed during the execution of his plan. Logistics, C4I, IW/C2W, operational fires, operational logistics and operational protection were used to support operational maneuver as the apex. Figure 2 illustrates the "Hail Mary" operational maneuver orchestrated by U.S. Army VII Corps.

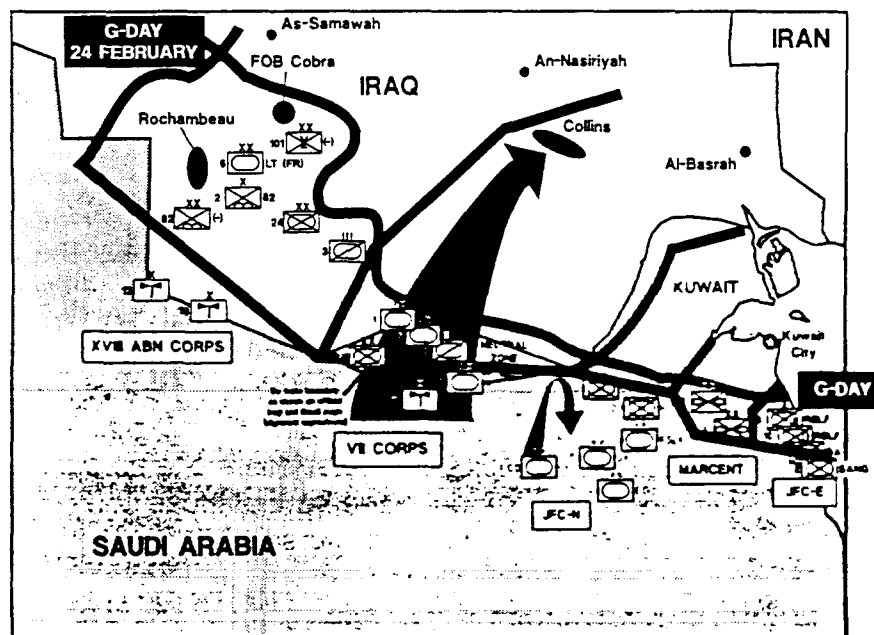


Figure 2. Coalition Disposition, G-Day <sup>17</sup>

The Marine Corps came aboard with the Army in 1989 with their doctrinal manual FMFM-1, *Warfighting*, which explicitly adopted Maneuver Warfare as their doctrine.

"...Maneuver warfare is the style of combat fighting conducted by the Marines." <sup>18</sup>

Nevertheless, the Marine Corps was maneuvered to Kuwait City in the same fashion as VII Corps. The maneuver apex theory can be applied to the Marines. The supporting operational functions were used to sustain operational maneuver units during the drive through Kuwaiti territory. Operational maneuver was at the apex of operational art functions during employment of Marine Corps mobile ground forces.

#### **B. WITHIN THE FRAMEWORK OF THE NAVY**

"The Navy has difficulty relating to maneuver at the operational-level of war and as a function of operational art; as a principle it is more tangible."

CAPT. Robert C. Rubel, USN, Naval War College Staff

CAPT. Rubel's quotation <sup>19</sup> above reflects the quandary within today's naval philosophy with expressing operational maneuver as an operational function at the operational-level of war. By comparing the *maneuver apex theory* to naval doctrine, the results are conclusive once again; the Navy can use the theory for conducting battle on the open sea. C4I, IW/C2W, operational fires, operational logistics and operational protection would support naval operational maneuver conducted on the open oceans.

The idea of conducting operational maneuver at the operational-level of war does not fit the mold for the "littoral" and "expeditionary" disposition of the Navy's approach to modern day naval warfare. Therein lays the problem. "From the Sea...white paper...published in 1992, replaces the "Maritime Strategy" and sets the direction of naval forces in the 1990's by

reemphasizing their expeditionary role." <sup>20</sup> "Though we retain our service roles of deterrence, sea superiority, and the protection of maritime trade, our naval focus has shifted to the world's unstable regions...placing a new emphasis on littoral operations." <sup>21</sup>

The change in doctrine was due to three primary reasons. The first reason is that the Navy has the perceived notion that there is no serious threat to their powerful Navy, because of the end to the "cold war". *Numerically* speaking, this is a correct assumption, because of the break-up of the former Soviet Union into quasi-democratic states. That assumption helped influence a change in naval doctrine. Military and civilian leadership wants to believe that the threat of large scale open ocean battles are gone forever. However, that mentality is not necessarily healthy from a long term standpoint, because of the uncertain stability of young democracies such as the former Soviet Union, where a resurgence of communism could effect their governments. This point is emphasized by van Creveld, "the possibility of a reconstituted Soviet (Russian) threat must be considered...it cannot be entirely ruled out." <sup>22</sup> This author is not indicating that the Navy has entirely ruled out that threat, but the lack of concern toward large scale battles at sea is troublesome.

Even if the current members of the former Soviet Union never again develop into a great super power, other potential adversaries cannot be discounted. The possibility of China, North Korea and other belligerents could form a coalition, mass their navy's together and challenge the United States. Most leadership would argue to the contrary, that a coalition like that would be an unlikely event. However, can anyone predict the future? To depend on the premise that the composition of future naval battles can be predicted, is a suicidal tendency and indicates a state of euphoria about combat at sea.

There is a disparity among JP 3-0 and NDP 1. The Joint Pubs pay great homage to operational maneuver. Operational maneuver basks in the limelight in chapters III and IV of JP 3-0. JP 3-0 defines Operational maneuver as follows, "Maneuver is a means by which JFCs set the terms of battle by time and location, decline battle, or exploit existing situations. Operational maneuver usually takes large forces from a base of operations to an area where they are in a position to achieve operational objectives." <sup>23</sup> That definition pertains to the old Navy doctrine of "Maritime Strategy" *and* the modern "From the Sea" "littoral and expeditionary" role. However, *NDP 1* is void of any conceptualization of "Maritime Strategy" for battles at sea, but is inundated with full page historical illustrations and documentaries pertaining to the deceased philosophy of "Maritime Strategy." These illustrations are shouting out, "Remember, this is the way we used to fight." The point here, is the Navy should focus their attention back to the basics of historical naval warfare to regain the vision of operational maneuver conducted at sea during historical conventional warfare.

The second reason for the change in doctrine is technology. The modern Navy enjoys tremendous standoff capable weaponry, which did not exist in during W.W.II, but enables the Navy to fight the enemy in relative seclusion if a battle at sea was to occur. However, this theory of battle must be fought on the premise that the Navy should engage the enemy first and continue to keep him off balance using naval weaponry technology (including aircraft) to maintain the advantage and eventually destroy the adversary. The Navy can probably do this with far fewer ships that have the advantage of technology over the enemy. What would happen if the Navy was challenged with the unexpected, such as an enemy armada of coalition ships surrounding their fleet? The enemy would then use the attrition style of warfare to



destroy the Navy. An opponent could bring up the premise that this would never happen, so why plan for it. That is just the point. Operational art planning should not leave any stone unturned.

The third reason for the change in doctrine is the shrinking budget and fight for existence. This caused the Navy and Marine Corps to tighten their relationship and bond together even more than before for mutual survival. No longer is the Navy called naval forces; the new term is "*Naval Expeditionary Forces*."

Naval strategy needs to shift back to the basics of naval warfare. Isn't reverting "back to the basics" always the case when the focus is lost? There is nothing wrong with the Navy shifting their focus to the expeditionary and littoral viewpoint, but to completely disregard a basic approach to fighting at sea such as "ships in line exchanging heavy broadsides against an enemy similarly arrayed," <sup>24</sup> is an invitation for the enemy to take advantage of the unsuspecting. Like a baseball game, all branches of the service must "cover all the bases" when planning for war. The war gaming simulations that were conducted at the Naval War College against Japan, were a good example of what happens if the unexpected (Kamikaze) is not planned for. The U.S. Navy, as the premier naval force on earth, cannot ignore to plan for the unexpected. Future battles at sea cannot be predicted, but the basics of Warfighting should always be adhered to, and operational maneuver at sea, should always be a part of the basic planning for peacetime or wartime scenarios.

### C. WITHIN THE FRAME WORK OF THE AIR FORCE

"Maneuver is the means by which the commander sets the terms for battle, declines battle, or acts to take advantage of tactical actions."

Air Force Manual 1-1, 1992

Comparatively, the Air Force adheres to the six operational functions while operating at the operational-level of war. The *maneuver apex theory* used as a common idea applies to the Air Force as well. The aircraft can be compared to ground mobile or naval forces which function at the operational-level of war. Operational maneuver continues as the apex of all functions, while the supporting functions continue to sustain maneuver.

However, the idea of operational maneuver conducted by the Air Force is the most difficult to understand, especially when applying the maneuver apex theory. The reason for this is that aircraft are cut off to a certain degree, from some of their supporting operational functions while enroute to their objective in the operational theater, whereas naval forces and particularly ground forces maintain a direct line with support function resources. Aircraft cannot maintain this "direct" line, especially the logistics function support (refueling, ordnance, etc.). "Logistical push" in the air is limited considerably when compared to the abundant supplies available for ground forces. Once airborne, aircraft rely or the most part, on their internal functional support for survivability. The inherent capabilities to tap quickly from the supporting functions, like the ground and naval forces do, is very limited with air forces in the operational environment moving to their objective or target.

van Crevald explains Air Force operational maneuver relative to space. He has created an interesting phenomenon pertaining to operational maneuver with air power. "Such spacings automatically change the nature of air power from the tactical to the operational, and

sometimes strategic." <sup>24</sup> This term "spacing" can be used to explain the relationship of distance and the ability to rely on the supporting functions, a reliance which is essential as illustrated in the *maneuver apex theory* where supporting functions are crucial, but as the aircraft return to their bases, and the distance of space decreases, the supporting functions become more accessible. Nevertheless, maneuver is never lost and the maneuver apex theory supports operational maneuver as the principle Air Force operating function in the theater of war.

## SECTION V

### CONCLUSIONS

The study manifests that there is validity with expressing maneuver as an operational function for the planning and execution of operational art. The *human element theory* unites maneuver as an operational function. Operational maneuver is the main ingredient for operational art planning and execution; without it, the military and war are invalid.

The *maneuver apex theory* explains the ideology that maneuver is the major function of operational art and why one function cannot exist without the other. The theory establishes a common ground for analyzing the use of maneuver as an operational function within each of the armed forces. Operational maneuver is thought about with more emphasis toward ground warfare and is more easily understood with that rationale.

The Navy believes that their "modern" strategy is sufficient for today's threat, but this philosophy ignores the element of open ocean battles, which were at the pinnacle of the deceased "Maritime Strategy." Historical battles on the sea, employed operational maneuver

as the fulcrum of naval warfare. The shift to the "From the Sea" strategy, was caused by important factors: the littoral and expeditionary mind set, the vast improvements with technology, the major budget reductions and restructuring and the new world order. All facts considered would lead one to believe that the Navy *is* on the right track, but the unexpected battle at sea, must be planned for and not void of any thought. The old cliché "history repeats itself" is a good reason not to leave any stone unturned during operational art planning and execution.

The *maneuver apex theory* can be applied to the Air Force operating environment, however, operational maneuver in the Air Force is the most difficult to grasp when compared to maneuvering on the ground or in a maritime environment. This can be explained by how space and distance effect the ability to maintain continuity with the supporting functions until that distance and space is reduced. With this explanation, operational maneuver with air forces can be thought about in a rational fashion. Operational maneuver will always exist, regardless of distance and space in the operational theater of war. Operational maneuver is necessary, and as a function, is more tangible for planning and execution of operational art.

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